

PRYANISHNIKOV, A.V.

Adapting tundra to meadows. Bot.zhur.39 no.1:48-57 Ja-P '54.
(MLRA 7:3)

1. Khatangskiy opornyy punkt Nauchno-issledovatel'skogo instituta
polyarnogo zemledeliya, zhivotnovodstva i promyslovogo khozyaystva,
poselok Khatanga Taymyrskogo natsional'nogo okruga.
(Tundras) (Meadows)

PRYANISUNIKOV, Boris Yefimovich; SEYFULLINA, L.I., red.; MAYOROV,
V.V., tekhn. red.

[Orenburg methods for sheepshearing] Orenburgskie priemy
strizhki ovets. Moskva, 1962. 16 p. (MIRA 16:6)

1. Moscow. Vystavka dostizheniy narodnogo khozyaystva.
"Pavil'on "Ovtsevodstvo."
(Orenburg Province--Sheepshearing)

PRYANISHNIKOV, Boris Yefimovich; SAVINOVA, Ye.I., red.; TSYURKO, M.I.,
tekhn. red.

[Orenburg method of sheepshearing] Orenburgskii metod strizhki
ovets. Orenburg, Orenburgskoe knizhnoe izd-vo, 1960. 38 p.
(MIRA 14:10)

(Sheepshearing)

PRYKHNIKOV, Dmitriy Nikolayevich, akademik; ISAYEV, V.A., rad.

[Chemicalization of agriculture and proper crop rotations]
O khimizatsii zemledeliia i pravil'nykh sevooborotakh.
Moskva, Izd-vo "Nauka," 1965. 45 p. (Novoe v zhizni,
nauke, tekhnike. V Serii: Sel'skoe khoziaistvo, no.11)
(MIRA 18:6)

FRYANISHNIKOV, Dimitriyy Nikolayevich, akademik [deceased];
PETERBURGSKIY, A.V., prof., otv. red.

[Popular agricultural chemistry] Populiarnaya agrokhiimiya.
Moskva, Nauka, 1965. 396 p. (MIRA 18:7)

DECLASSIFIED
PRYANISHNIKOV, Dmitriy Nikolayevich , 1865-1948; KURSANOV, A.L.,
akademik, redaktor; ZHITOV, S.P., redaktor; AUZAN, N.P.,
tekhnicheskiiy redaktor.

[Selected works] Izbrannye sochinenia. Moskva, Izd-vo
Akademii nauk SSSR, Vol.4, 1955. 596 p. (MLRA 8:12)
(Agricultural chemistry)

PRYANISHNIKOV, D.N., akademik

Basic tasks in the field of the chemicalization of agriculture.
Izv. TSKHA no.1:172-185 '64. (MIRA 17:4)

PRYANISHNIKOV, G.I., inzh.

Mechanizing opening of ventilation doors. Bezop.truda v prom. 3

no.7:33 JI '59.

(MIRA 12:11)

(Mine ventilation)

PRYANISHNIKOV, G.I., inzh.; MAKLYUCHENKO, A.K., inzh.

UPM-1 incline loader. Ugol' 33 no.12:24-25 D '58. (MIRA 11:12)

1. Shakhta "Kapital'naya-2."
(Coal handling machinery)

1962/000/002/001/004
8100/8100

AUTHOR: Pryanishnikov, I
TITLE: Basic crucibles for induction furnaces
PERIODICAL: Справочник, no 2 1962, 66-70

TEXT: The technique of producing basic crucibles by pneumatic ramming at a pressure of 3 atm was worked out in the "Elektrostal" ("Elektrostal" plant). The stability of crucibles was tested up to 70 melts for furnaces with 150 and 500 kg contents, and up to 15 melts for 1500 kg furnaces. The masses were produced from МТМЗ (МФМЗ), МПЭП (МРЕП), МТК (МТК) magnesite, broken magnesite chromite bricks, caustic magnesite, purified fluorspar, and fireclay. Crucibles made of 42.5% magnesite powder, 1.5% broken magnesite chromite bricks, 7.5% caustic magnesite, 1% fluorspar, and 0.75% fireclay with 5% water and a minimum content of 72.0% MgO, 7.0-8.7% Cr₂O₃, 8.1-9.0% Fe₂O₃, and 0.1-0.2% CaO proved to be of highest stability. The durability of crucibles was found to be reduced considerably by an increase in the contents of fireclay and fluorspar. At 1.76 g/cm³ of rammed mass, the compression strength σ of Card 1/2

Basic crucibles for production ...

S/151/002/001/004
B105/B107

sintered shank. 140 kg/cm^2 , at 1.90 g/cm^3 it was 196 kg/cm^2 . The inductor was insulated with a 4-5 mm plaster of ground quartzite and alabaster, which withstands up to 6-8 kv. The furnace slag must contain at least 15% MgO to avoid migration of MgO from the crucible lining into the slag, and destruction of the slag zone in the crucible. There are 2 figures and a table.

ASSOCIATION: Zavod "Elektrostal'" ("Elektrostal'" Plant)

Card 2/2

PRYANISHNIKOV, I.S.

Basic crucibles for induction furnaces. Ogneupory 27 no.2:66-70
'62. (MIRA 15:3)

1. Zavod "Elektrostal'."
(Electric furnaces) (Crucibles)

PRYANISHNIKOV, I. S.

Electrometallurgical Plant, Novocromotorsky

"Production of the X-20H/80 Alloy 'Nimonic' in Vacuum Induction Furnace."

paper presented at Second Symposium on the Application of Vacuum in Metallurgy.

Spasov *July 1988*

AUTHOR: Pryanishnikov, I.S.

SOV/130-58-9-6/23

TITLE: Production of Transformer Steel under Vacuum (Vyplavka transformatornoy stali pod vakuomom)

PERIODICAL: Metallurg, 1958, ³/₁ Nr 9, pp 16 - 17 (USSR)

ABSTRACT: Successful melting in 1954 of heats of transformer steel under vacuum (0.5-1.0 mmHg) in an experimental, 150-kg furnace in Nr 3 shop at the "Elektrostal'" Works yielded information on this process and two variants were developed in 1955. This work is described and the following main conclusions drawn: 1) transformer steel and similar alloys should be melted in vacuum induction furnaces at least 1 ton in capacity provided with a second inductor for melting adhesions formed during the boil and arrangements for slag removal under vacuum; a pressure of about 1 mmHg should be maintained; 2) since phosphorus and sulphur cannot be satisfactorily dealt with directly in the vacuum furnace, these elements should be absent from the charge; 3) it is not satisfactory to keep previously deoxidised metal under vacuum. The fundamentals of the vacuum melting of transformer steel are given as: the metal to be under vacuum from the end of melting to the end of the boil; the metal is refined under vacuum with

Card 1/2

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343420013-0

Production of Transformer Steel under Vacuum

SOV/130-58-9-6/23

carbon (broken electrodes) producing a vigorous boil for 10-30 min; ferrosilicon is added under vacuum, the metal with silicon being kept under vacuum for less than 10 min; the metal is poured under vacuum or in a neutral atmosphere. Data showing the superiority of vacuum-melted transformer steel as regards purity and electro-magnetic properties are tabulated. There is 1 table.

ASSOCIATION: Zavod "Elektrostal'" im. I.F. Tevosyana
("Elektrostal'" Works im. F.I. Tevosyan)

Card 2/2

1. Steel--Production 2. Vacuum furnaces--Operation

ACC NR: AP6030265

EWT(d)/EWT(m)/EWP(v)/T/EWP(t)/ETI/EWP(k)/EWP(h)/EWP(l) LJP(c)
(N)JD/HM/HW SOURCE CODE: UR/0125/66/000/008/0001/0005AUTHOR: Paton, B. Ye.; Lakomskiy, V. I.; Dudko, D. A.; Zabarilo, O. S.;
Pryanishnikov, I. S.; Topilin, V. V.; Klyuyev, M. M.ORG: [Paton; Lakomskiy; Dudko; Zabarilo] Electric Welding Institute im. Ye. O. Paton,
AN UkrSSR (Institut elektrosvarki AN UkrSSR); [Pryanishnikov; Topilin; Klyuyev] Elektrostal'
Plant im. I. F. Tevosyan (Zavod "Elektrostal'")

TITLE: Plasma arc melting of metals and alloys

SOURCE: Avtomaticheskaya svarka, no. 8, 1966, 1-5.

TOPIC TAGS: plasma arc, metal melting, plasma arc melting, plasma arc furnace

ABSTRACT: A plasma arc furnace (see Fig. 1) for melting metals and alloys has been designed and built. The furnace is equipped with a PDM-3 plasma gun operating with a power input of 5-50 kw at a working voltage of 40-80 v and an open circuit voltage of 120 v. Ingots are 50-100 mm in diameter and up to 600 mm long. Several metals and alloys were melted in this furnace. It was found that the surface quality of the ingots was very high, there were no shrinkage holes, and the content of gaseous impurities was reduced significantly. For instance, the oxygen content in an NP-3 nickel (99.3% Ni+Co) dropped from $1.77 \cdot 10^{-2}\%$ to $3.7 \cdot 10^{-4}\%$ and the density of the metal increased from 8.804 to 8.8424 g/cm³. The ingots were cold rolled from 75 mm to 0.10 mm with only one process annealing. In comparison with the original alloy, the formability improved 2-3 times, the rupture strength 40-60%, and elongation and

Card 1/2

UDC: 621.791:669.187.6

L 43826-66

ACC NR: AP6030265

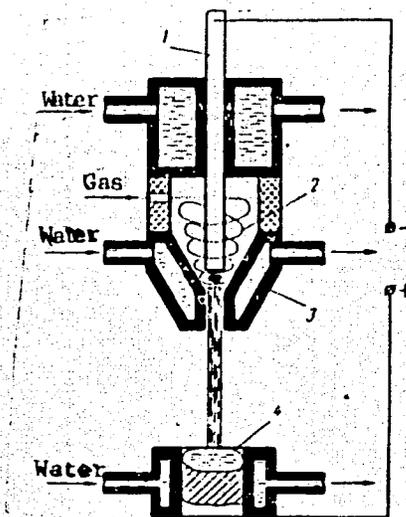


Fig. 1. Plasma furnace with direct action plasma gun

1 - Tungsten cathode; 2 - argon flow; 3 - water cooled nozzle; 4 - molten metal.

reduction of area 20—30%. Orig. art. has: 6 figures.

[TD]

SUB CODE: 13/ SUBM DATE: 28Mar66/ ATD PRESS: 5072

Card 2/2

PRYANISHNIKOV, M. [Prianyshnykov, M.], kand.fizi.-matem.nauk

In the world of ultra high pressures. Znan. ta pratsia no.7:
14-15 J1 '61. (MIRA 14:8)
(High pressure research)

GERTSRIKEN, S.D. [deceased]; PRYANISHNIKOV, M.P.; SLASTNIKOVA, L.F.

Parameters of the diffusion process in β -modification of titanium
and its alloys with small additions of iron, cobalt and nickel.

Sbor. nauch. rab. Inst. metallofiz. AN URSS no.13:88-92 '61.

(MIRA 14:12)

(Titanium--Metallurgy)
(Diffusion)

FRYANOV, A. N. 1960, D. F.

TABLE I BOOK CITATION 80/4502

Alloys and their properties. Handbook for the design of heat-resistant alloys. Vol. 6 (Investigations of Heat-Resistant Alloys, Vol. 6) Moscow, 1960. 319 p. Russian and English. 5,000 copies printed.

Authoring Agency: Academy of Sciences, Institute of Metallurgy, Leningrad, U.S.S.R.

Editorial Board: I. B. Shubin (General Editor), G. V. Burdakov, S. V. Akimov, Corresponding Member of the Academy of Sciences (Rep. Ed.), I. A. Gilling, I. M. Melikov, and I. P. Zhilin, Co-Editors of Technical Sections; M. of Publishing House V. A. Ekimov, Tech. Ed.; S. O. Nikolayeva.

Remarks: This book is intended for research workers in the field of physics of metals and for metallurgists, particularly those working on heat-resistant alloys.

CONTENTS: This collection of 43 articles deals with various problems in the production of heat-resistant alloys. Special attention is paid to the mechanism of deformation of such metals as aluminum, copper, iron, and nickel. Various defects and failures of metals are analyzed, and means for increasing the heat resistance and plasticity are described. Among the special problems discussed are electrostatic conductivity of heat-resistant alloys; the role of dislocations in the mobility of atoms in crystals; the mechanism of creep; the effect of their crystalline structure on the rate of change in isolated pores; the irreversible thermal expansion of 1/111 bodies, etc. No personal notes are included. References follow each article.

Doblyter, I. N. Influence of the Defects of Crystalline Structure on the Rate of Creep Activation 39

Shubnikov, I. B., and A. I. Isakovich. Influence of Temperature and Degree of Prior Deformation on the Plasticity of Aluminum and Copper 34

Pratt, L. R., G. I. Danov, and S. A. Aleksandrov. The Mechanism of the Kinetics of Deformation in Alloys 38

Burakov, G. V., E. V. Shchegolev, and M. P. Kuznetsov. Effect of the Deformation of Single Crystals on the Temperature-Volume Ratio of the Mechanical Properties of Duralumin Under Compression 49

Shubnikov, I. B., E. V. Shchegolev, E. N. Shubnikov, V. B. Polunov, G. V. Burakov, and A. P. Pavlov. Effect of Temperature on the Creep and Plasticity of Metals with Different Degrees of Deformation of Carbide Inclusions 56

Shubnikov, I. B., and V. A. Pivovarov. Dependence of Stress-Creep Alloy Creep Upon the Concentration of Solid Solution and Deformation Conditions 64

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Oliver, J. A., and V. A. Gendakov. Mechanisms of Metal Strain in Creep Under Elevated Temperature Conditions 89

Derjagin, A. B., and M. P. Kuznetsov. The Effect of Strain in Iron and Its Alloys With Aluminum on the Temperature-Volume Ratio 95

Derjagin, A. B., I. B. Shubnikov, V. B. Polunov, and S. N. Mal'kov. The Mechanism of the Kinetics of Creep of Heat-Resistant Alloys in Solid State 99

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Derjagin, A. B., and I. I. Davydov. Experimental Determination of the Change of Components in Solid-Solution Alloys of Ni-Al System 112

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Derjagin, A. B., V. V. Anonimov, and A. E. Piter. Effect of Nickel Concentration on the Structure of the Energy Spectrum of Crystalline and Iron Elements 130

Derjagin, A. B., and G. A. Zhuravina. Investigation of Geometric Distortions of the Crystalline Lattice of an Alloy According to the Scattering of X-Rays and Thermal Expansion 136

GERTSRIKEN, S.D. [Hertsriken, S.D.]; PRYANISHNIKOV, M.P. [Prianyshnykev, M.P.]

Effect of the type of crystal lattice and volume pressure on the self-diffusion parameters of iron in pure iron and iron with minor aluminum impurities [in Ukrainian with summary in English]. Ukr. fiz. zhur. 3 no.2:255-264 Mr-Apr '58. (MIRA 11:6)

1. Institut metalofiziki AN URSR.
(Diffusion) (Iron)

GERTSRIKEN, S.D.; PRYANISHNIKOV, M.P.

Regularities of the dependence of the rate of diffusion on the
magnitude of pressure. Sbor. nauch. rab. Inst. metallofiz. AN URSSR
no. 16:183-185 '62. (MIRA 16:5)

(Diffusion)

GERTSRIKEN, S.D.; PRYANISHNIKOV, M.P.

Relation of the effect of compression from all sides on the rate of diffusion, to the character of initial defects in an alloy's crystal lattice. Sbor. nauch. rab. Inst. metallofiz. AN URSR no. 16: 111-114 '62.

(MIRA 16:5)

(Alloys--Testing) (Crystal lattices--Defects)

RUSSIAN BOOK REPRODUCTION 807/1177

Arzentsya and Chernitskiy S.P., Institut metallofiziki
 Voprosy fiziki metallov i metallofiziki (Problems in the Physics of Metals and
 Metallophysics) Kiev, Izdatel AN USSR, 1989. 215 p. (Series: Ite: Sbornik
 nauchnykh rabot, no. 10) 2,000 copies printed.

Ed. of Publishing House: O.M. Pechkovskaya; Tech. Ed.: N.A. Bunin; Editorial
 Board: V.M. Svecnikov, Academician, Academy of Sciences URSS (Resp. Ed.),
 S.B. Gertshteyn, Doctor of Physics and Mathematics, and I.Ye. Dakhlyar,
 Doctor of Technical Sciences.

PURPOSE: This collection of articles is intended for scientific workers, engineers
 and engineers working in metal physics, metallography and metallurgy, and for
 students in advanced courses of metallurgy and physics departments.

CONTENT: The collection of articles gives the results of an investigation of the effect
 of light waves on the phase transformations, structure and properties of metals and
 alloys, and of the effect of alloying additives on volume and intergranular

Problems in the Physics of Metals and Metallography 807/1177

diffusion in alloys, as well as the effect of repeated working by ultrasonic
 irradiation on the physical properties of alloys. There is also a description
 of an x-ray camera for studying the structure of the individual grains. The
 following personalities are mentioned: V. Raaba, A.A. Saitov, S.G. Glazunov,
 Ye.I. Korovin, V. Danilenko, L.M. Klotov, and I. Ya. Dakhlyar, Doctor of
 Technical Sciences. There is a bibliography of Soviet and non-Soviet references
 at the end of each article.

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35175

S/601/61/000/013/007/017
D207/D302

18.11.81

AUTHORS: Gertoriken, S. D. (deceased), Pryanishnikov, M. P. and
Glasnikova, E. P.

TITLE: Parameters of the diffusion process in the β -modifica-
tion of titanium and its alloys containing small admix-
tures of iron, cobalt and nickel

SOURCE: Akademiya Nauk Ukrayins'koyi RSR. Instytut metalofyzy-
ky. Sbornik nauchnykh rabot, no. 13, 1961. Voprosy fi-
ziki metallov i metallovedeniya, 88-92

TEXT: The authors report a study of diffusion of Fe, Co and Ni in
the β -modification (b.c.c. structure) of 99.7% pure Ti and its
three alloys, containing 4 at.% Fe, 4 at.% Co and 4 at.% Ni. Dif-
fusion annealing was carried out at 800 - 1200°C in a quartz tube
filled with argon at atmospheric pressure. The argon was purified
by burning Mg in the tube. Diffusing elements were in the form of
radioactive tracers: Fe⁵⁵⁻⁵⁹, Co⁶⁰, Ni⁵⁹⁻⁶³. Concentration of a

Card 1/2

Y

Parameters of the ...

S/601/61/000/015/007/017
D207/D302

tracer at a given distance along the sample was found by autoradiography: the sample was placed in contact with a photographic film and the optical density of the resultant image was measured with a microphotometer IMF-4 (IMF-4). Diffusion coefficients D were deduced from $D = -0.1086/t \cdot \tan \alpha$, where t is the duration of the diffusion annealing and $\tan \alpha$ is the slope of the tracer concentration plotted against the square of the distance along the sample. Atmos. of Fe, Co and Ni moved very rapidly in β -Ti and its alloys: The diffusion coefficients were of the order of 10^{-7} cm²/sec. The activation energy E and the pre-exponential factor D_0 in $D = D_0 \exp(-E/RT)$ were both greater for diffusion of iron in the Ti-Fe alloy than in pure titanium, but this increase was such that the resultant D remained the same in Ti-Fe as in Ti. A similar effect was observed in diffusion of cobalt and nickel in Ti-Co and Ti-Ni alloys respectively. There are 3 figures and 2 tables.

SUBMITTED: January 13, 1960

Card 2/2

S/601/62/000/016/025/029
E193/E383

AUTHORS: Gertsriken, S.D. (Deceased) and Pryanishnikov, M.P.

TITLE: Pressure-dependence of the diffusion rate

SOURCE: Akademiya nauk Ukrayins'koyi RSR. Instytut metalofyzyky. Sbornik nauchnykh rabot. no. 16. Kiyev, 1962. Voprosy fiziki metallov i metallovedeniya. 183 - 185

TEXT: The object of the present investigation was to derive expressions describing the effect of pressure on the rate of diffusion in alloys. The experiments were conducted on Ti - 4 at.% Co and Ti - 4 at.% Fe alloys at 950 °C under hydrostatic pressures ranging from 1 to 255 atm. The diffusion rates of Fe and Co were determined by the autoradiographic method. The results obtained indicate that the relationship studied is described by:

$$D_{pT} = D_{1T} \exp (K_T \sqrt{P - 1})$$

where D_{pT} is the diffusion coefficient at a temperature T and pressure P , D_{1T} is the diffusion coefficient at temperature T

Card 1/2

Pressure-dependence of

5/601/62/000/016/025/029
E193/E383

and atm., K_T is a constant depending on temperature; for the self-diffusion of Fe, K_T is equal to 0.13 and 0.07 atm.^{-1/2} at 930 and 950 °C, respectively; for the self-diffusion of Co at 930 °C $K_T = 0.11$ atm.^{-1/2}. The validity of the above equation is demonstrated in Fig. 1, where $\log D$ at 930 °C is plotted against the pressure (P, atm.), the circles denoting experimental data for the diffusion of Co in the Ti-Co alloy, the crosses the diffusion of Fe in the Ti-Fe alloy and the broken curves representing values of D calculated from the formula derived by the present authors. There are 2 figures.

SUBMITTED: January 26, 1962

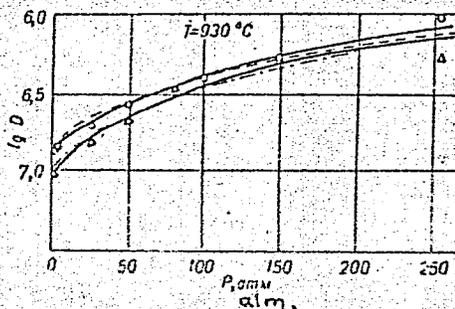


Fig. 1:

Card 2/2

PRYANISHNIKOV, M. P.
AID Nr. 984-14 6 June

EFFECT OF HYDROSTATIC COMPRESSION ON DIFFUSION RATE IN
Ag-Zn ALLOYS (USSR)

Gertsriken, S. D. (Deceased), and M. P. Pryanishnikov. IN: Akademiya
nauk UkrSSR. Institut metallofiziki. Sbornik nauchnykh trudov, no. 16,
1962, 178-182. S/601/62/000/016/024/029

The self-diffusion of Zn in Ag-33 at.% Zn and Ag-48 at.% Zn alloys under a hydrostatic pressure of 100 atm has been studied in an attempt to determine the relation between the initial defectiveness of the alloy lattice and the rate of diffusion under conditions of hydrostatic pressure. The alloys were melted from 99.99% pure Ag and Zn and homogenized at 600°C for 24 hrs. The average grain size was of - 1-2 mm. Diffusion annealing was done in argon under a pressure of 100 atm in the 300-650°C range. The average rate of self-diffusion in the Ag-33% Zn alloy at 500, 550, 600, and 650°C was 0.188, 0.800, 2.25, and $2.72 \cdot 10^8$ cm²/sec, respectively, compared with 0.0237, 0.405, 0.110, and $0.27 \cdot 10^8$ cm²/sec at atmospheric pressure. The corresponding figures for the Ag-48% Zn alloy at 300, 400, 450, and 550°C were 1.18, 2.79,

Card 1/2

AID Nr. 984-14 6 June

EFFECT OF HYDROSTATIC COMPRESSION (Cont.)

S/601/62/000/016/024/029

3.35, and $4.60 \cdot 10^7$ cm²/sec at 100 atm, and 0.02, 0.33, 4.1, and $6.65 \cdot 10^7$ cm²/sec at atmospheric pressure. Thus, regardless of the lattice type and degree of defectiveness, hydrostatic compression increases the rate of self-diffusion in polycrystals. An approximate ten to thirtyfold increase in the self-diffusion rate for the Ag-33% Zn alloy (fcc lattice) and a tenfold increase for the Ag-48% Zn alloy (bcc lattice) show that hydrostatic pressure increases self-diffusion more effectively in the alloy having a denser packing of atoms and a more perfect lattice. The data show also that with increasing temperature, and consequently, increased ductility of the metal, the effect of hydrostatic pressure diminishes because of a higher rate of recrystallization. [MS]

Card 2/2

Pryanishnikov, M.P.

82646

S/126/60/010/02/018/020

E111/E335

187500 18.1285

AUTHORS: Gertsriken, S.D. and Pryanishnikov, M.P.

TITLE: Influence of Volumetric Hydrostatic Compression on Diffusion Parameters in a Titanium-iron Alloy

PERIODICAL: Fizika metallov i metallovedeniye, 1960, Vol. 10, No. 2, pp 297 - 299

TEXT: In this letter to the editor the authors describe development of their previous work in this field. In their present work the authors studied iron diffusion in polycrystals (2 mm average grain size) of titanium with 4 atom % iron at 1-170 atm. The autoradiographic method, as previously described by them (Ref. 3), was used, the tracer being $Fe^{55,59}$. Diffusion-coefficient values for 950 and 1 200 °C and various pressures are tabulated. Fig. 1 shows the logarithm of the diffusion coefficient as a function of pressure and Fig. 2 as a function of reciprocal of absolute temperature. The greatest magnifying effect on diffusion is produced by the first pressure increases and at the lower temperature. The activation energy of the process decreases with increasing pressure. The results obtained agree with those of Card 1/2

82646

S/126/60/010/02/018/020

Influence of Volumetric Hydrostatic Compression on Diffusion
Parameters in a Titanium-iron Alloy

E111/E335

the authors' previous work (Refs. 1, 2) and show a clear relation
between diffusion and pressure.

There are 2 figures, 1 table and 3 Soviet references.

ASSOCIATION: Institut metallofiziki AN USSR (Institute of
Metal Physics of the Ac.Sc., Ukrainian SSR)

SUBMITTED: March 17, 1960

X

Card 2/2

FRYANISHENIKOV, M. P., Candidate Phys-Math Sci (diss) -- "The effect of the type of crystal lattice and of general hydrostatic compression on the parameters of autodiffusion in iron and in alloys of it with small amounts of aluminum".

Kiev, 1959. 11 pp (Acad Sci Ukr SSR, Joint Academic Council of Inst of Phys and Math), 120 copies (KL, No 24, 1959, 126)

GERTSRIKEN, S.D.; PRYANISHNIKOV, M.P.

Investigating the volume diffusion of iron in alloys. Sber. nauch.
rab. Inst. metallofiz. AN URSS no.9:147-153 '59.

(MIRA 12:9)

(Diffusion) (Iron alloys)

50V/2306

18(4.7): 25(1) PHASE I BOOK EXPLOITATION

ТРЯНОВ, Д. П. / HAIKOV, M. P.

Академія наук Української СРР. Інститут металознавства
Вопросы физики металлов и металлоденитизации (Problems in the Physics of Metals and Metallurgy) Kiev, Izd-vo AN Ukrainakiy SSR, 1969. (Series: Irsi; Sbornik naukovykh robot, Nr 9) Errata slip inserted. 3,000 copies printed.

Ed. of Publishing House: V.I. Shurko; Tech. Ed.: M.I. Yefimova; Editorial Board: V.N. Svecnikov, Academician, Academy of Sciences, Ukrainian SSR (Resp. Ed.); S.D. Gerstman, Doctor of Physical and Mathematical Sciences; and I.Ya. Bakhchar, Doctor of Technical Sciences.

PURPOSE: This collection of articles is intended for scientific workers, aspirants, and engineers in the fields of the physics of metals, metallurgy, and metallurgy. It may also be useful to students of advanced courses in metallurgical and physical faculties.

COVERAGE: This collection of articles deals with the following topics: effect of high-speed heating, heat treatment, deformations, and crystallization conditions on phase transformations, structures, and properties of metals and alloys; the effect of additional alloying components on volumetric and intercrystalline diffusion in alloys; and the effect of repeated quench hardening and redrawing on the physical properties of alloys. No periodicals are mentioned. References follow several of the articles.

Svecnikov, V.M., and A.Ya. Svecstov. Investigation of Transformations in the Solid State of Cobalt-Rich Co-Cr Alloys. Changes in cobalt-base solid solutions and a more precise determination of phase ranges in equilibrium diagrams of the Co-Cr system are investigated. The microstructure of alloy samples is discussed. 105

Svecnikov, V.M., Yu.A. Kocherzhinskii, Ye.Ye. Mastryuk, V.M. Pao, and A.K. Shurkin. Investigation of the Cr-Nb-V Alloy System. Constitution diagrams and microstructures of various binary and ternary alloys were investigated. Changes of hardness with changes of temperature are shown. 120

Lesnik, A.G., and G.V. Kharlamova. Displacement of Equilibrium Curves of α - and β -phases in the Fe-Cr Alloy System Due to Prolonged High-temperature Heating of the γ -phase. 133

Electrolytic chromium and iron were used for making the alloyed spiral samples, 20mm. long, were heated in a vacuum (10⁻⁶ mm. Hg), and electrical resistivity was measured. The drop of resistivity at the α - β -transformation is discussed. 139

Tikhonova, Ye. A. Anisotropy in the Diffusion in Cu-Au Alloys Undergoing Ordering of Diffusion Coefficients for alloys undergoing ordering is measured analytically by the method of mean energies and by the "configuration method." 147

Gerstman, S.D., and M.P. Pryanishnikov. Investigation of Volumetric Diffusion of Iron in Alloys. Alloys composed of Fe + 0.27 percent Al, and Fe + 0.39 percent Al, were investigated. Samples, 10 x 7 x 2.5mm., were deformed and annealed. The mean grain size did not change after diffusion annealing (770 to 1240°C). The polished surfaces of the samples were coated with radioactive iron (100 to 150 microns thick). The depth of the diffusion layer (100 to 150 microns) varied with temperature and time of annealing. 154

Gerstman, S.D., T.K. Vatsenko, and V. Svecstov. Investigation of Diffusion of Cobalt and Iron Along Grain Boundaries of Cobalt, Nickel, and Iron. The absolute values of diffusion coefficients for Co-Co, Co-Ni, Co-Fe, Fe-Fe, and Fe-Ni, and the relationship between diffusion and volumetric diffusion, is discussed. 154

PRYANISHNIKOV, N.

Let's have more initiative and self-reliance. Sov.profsoluzy 5
no.3:19-23 Mr '57. (MIRA 10:4)

1. Predsedatel' komiteta profsoyusa Novosibirskogo zavoda imeni
A.I.Yefremova.
(Trade unions)

18(7)

PHASE I BOOK EXPLOITATION SOV/3355

Akademiya nauk SSSR. Institut metallurgii. Maschinny sovet po probleme zharoprochnykh splavov
 Issledovaniya po zharoprochnym splavam, t. IV (Studies on Heat-Resistant Alloys, vol. 4), Moscow, Izd-vo AN SSSR, 1959. 400 p. Errata slip inserted. 2,200 copies printed.
 Ed. of Publishing House: V. A. Kiliyay; Tech. Ed.: A. P. Gusev; Editorial Board: V. P. Bardin, Academician; G. V. Kurdyumov, Academician; A. Azev; Corresponding Member, USSR Academy of Sciences; I. A. Odintsov; I. M. Pavlov, and I. P. Zudin, Candidate of Technical Sciences.

PURPOSE: This book is intended for metallurgists concerned with the structural metallurgy of alloys.

COVERAGE: This is a collection of specialized studies of various problems in the structural metallurgy of heat-resistant alloys. Some are concerned with theoretical principles, some with descriptions of new equipment and methods, others with properties of specific materials. Various phenomena occurring under specified conditions are studied and reported on. For details, see Table of Contents. The articles are accompanied by a number of references, both Soviet and non-Soviet.

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Studies (Cont.) SOV/3355

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Card 6/12

GERTSRIKEN, S.D.; PRYANISHNIKOV, M.P.

Self diffusion in iron and its alloys with aluminum in the high
temperature δ -range. Issl. po zharopr. splav. 6:95-98 '60.

(MIRA 13:9)

(Iron--Metallography)

(Diffusion)

GERTSRIKEN, S.D.; PRYANISHNIKOV, M.P.

Effect of hydrostatic pressure from all sides on the diffusion parameters
in titanium-iron alloys. Fiz. met. i metalloved. 10 no.2:297-300 Ag
'60. (MIRA 13:9)

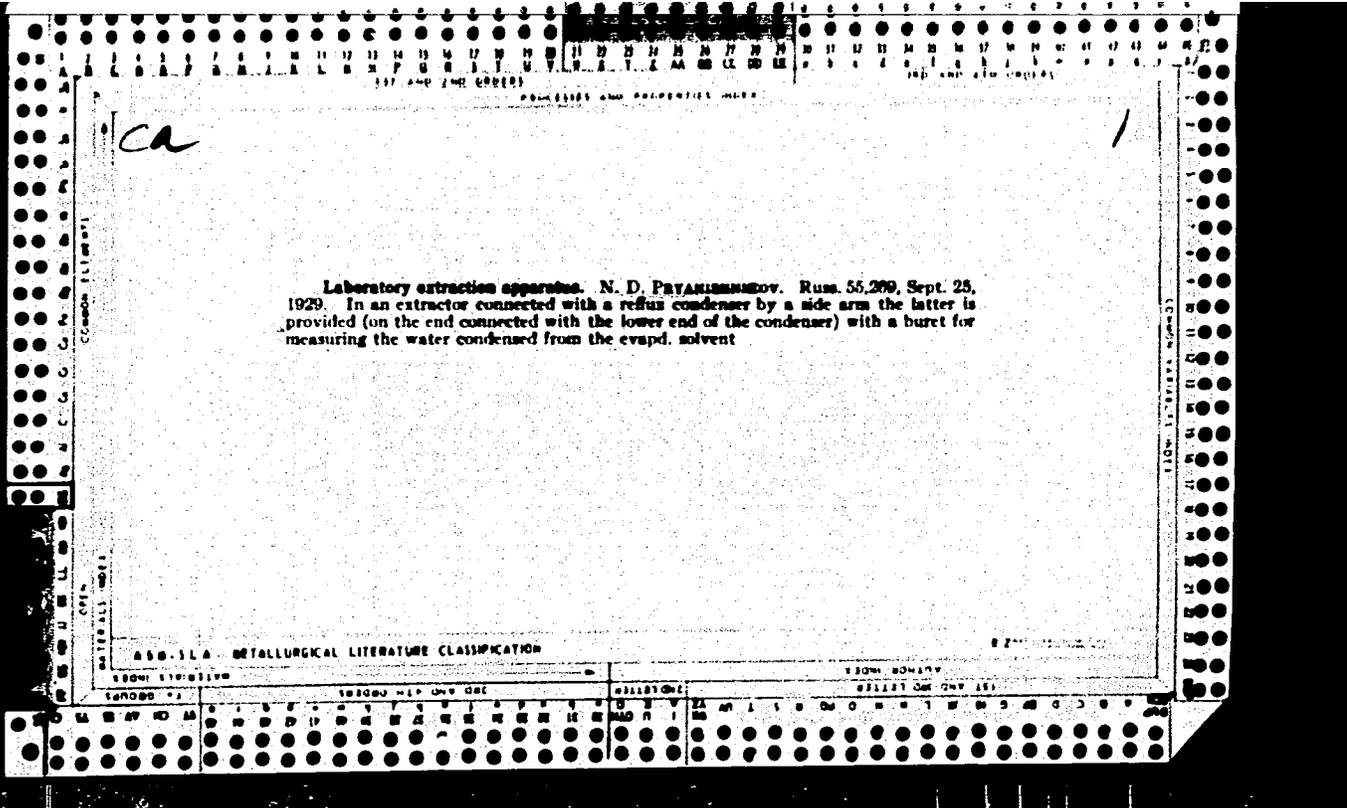
1. Institut metallofiziki AN USSR.

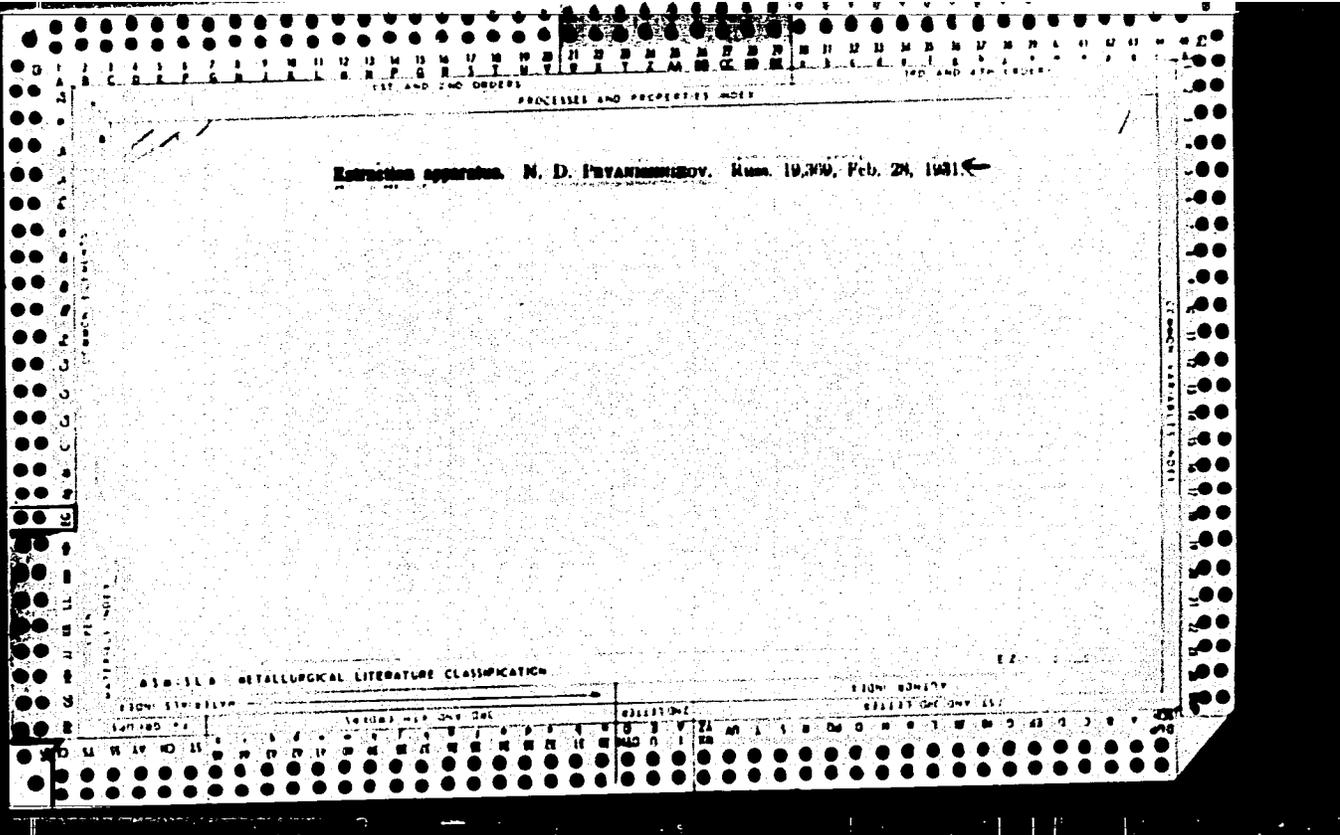
(Titanium-iron alloys)

(Diffusion)

(Pressure)

1ST AND 2ND ORDERS													3RD AND 4TH ORDERS												
PROCESSES AND PROPERTIES INDEX																									
CA													1												
LABORATORY EXTRACTION APPARATUS. A. M. Galkin. Russ. 36, 138, Nov. 29, 1928 LABORATORY EXTRACTION APPARATUS. N. D. Pryanishnikov. Russ. 6, 269, Sept. 26, 1929. In the extractor connected with a reflex condenser by a side arm the latter is provided (on the end connected with the lower end of the condenser) with a buret for measuring the water condensed from the evapd. solvent.																									
METALLURGICAL LITERATURE CLASSIFICATION																									
SUBJECTS													AUTHORS												





117 AND 2ND ORDERS PROCESSES AND PROPERTIES INDEX 3RD AND 4TH ORDERS

BC B-2-2

Production of feeding-stuffs from straw.
N. D. PHARMACONOMOY (Lening. Acad. Agric. Sci. U.S.S.R., 18th Internat. Physiol. Congr., 1955, 241-248).—Digestibility of roughage is influenced by the lignin (I) and H_2O_2 contents, by the micellar condition of the cellulose (II), and the nature of the inerts. Treatment of straw with Cl_2 or Cl_2O destroys (I) and increases the digestibility of the (II). A method described for determining (I) is based on removal of easily hydrolyzed carbohydrates by heating with 3% HCl and subsequent decomp. of (II) in the dried residue with 73-8% H_2SO_4 . *Can. Ass. (p)*

A 50-31 A METALLURGICAL LITERATURE CLASSIFICATION

FROM STRIP

SEARCHED	SERIALIZED	INDEXED	FILED
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1ST AND 2ND GROUPS
3RD AND 4TH GROUPS
5TH AND 6TH GROUPS

PROCESSES AND PROPERTIES INDEX

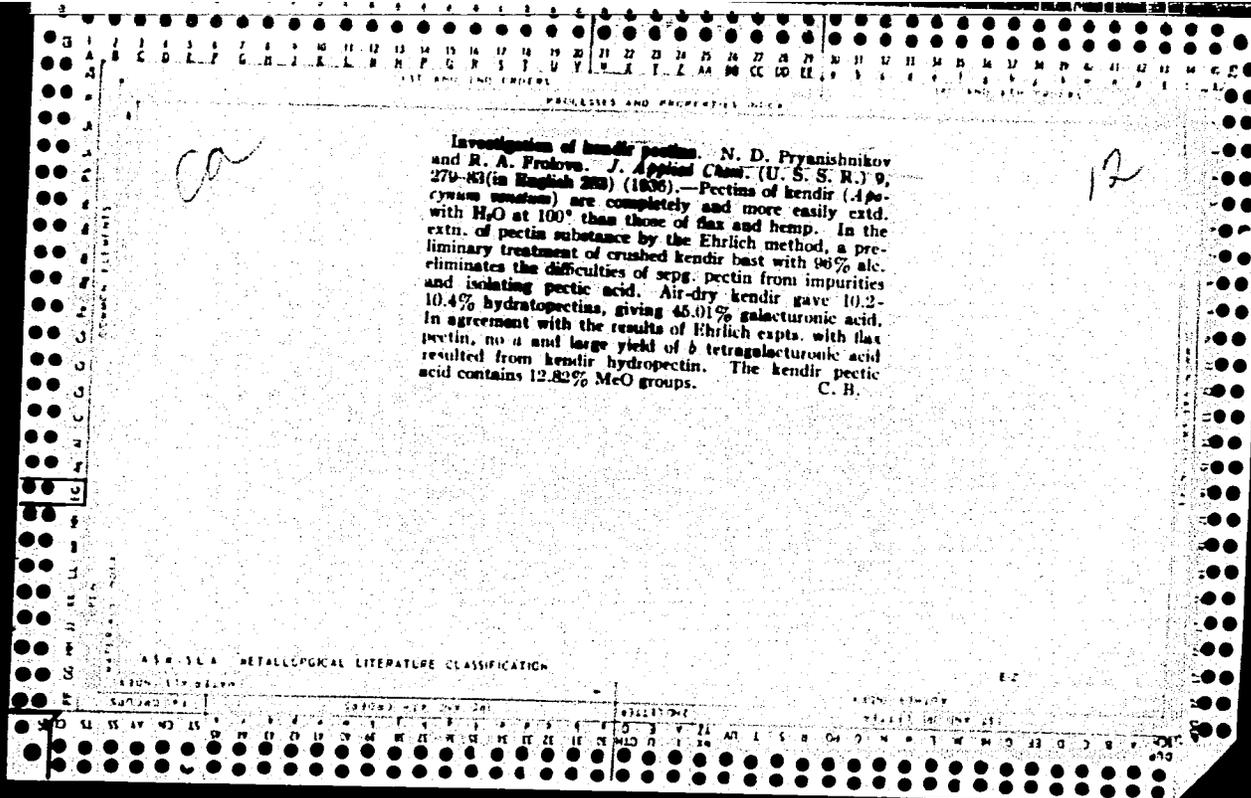
12

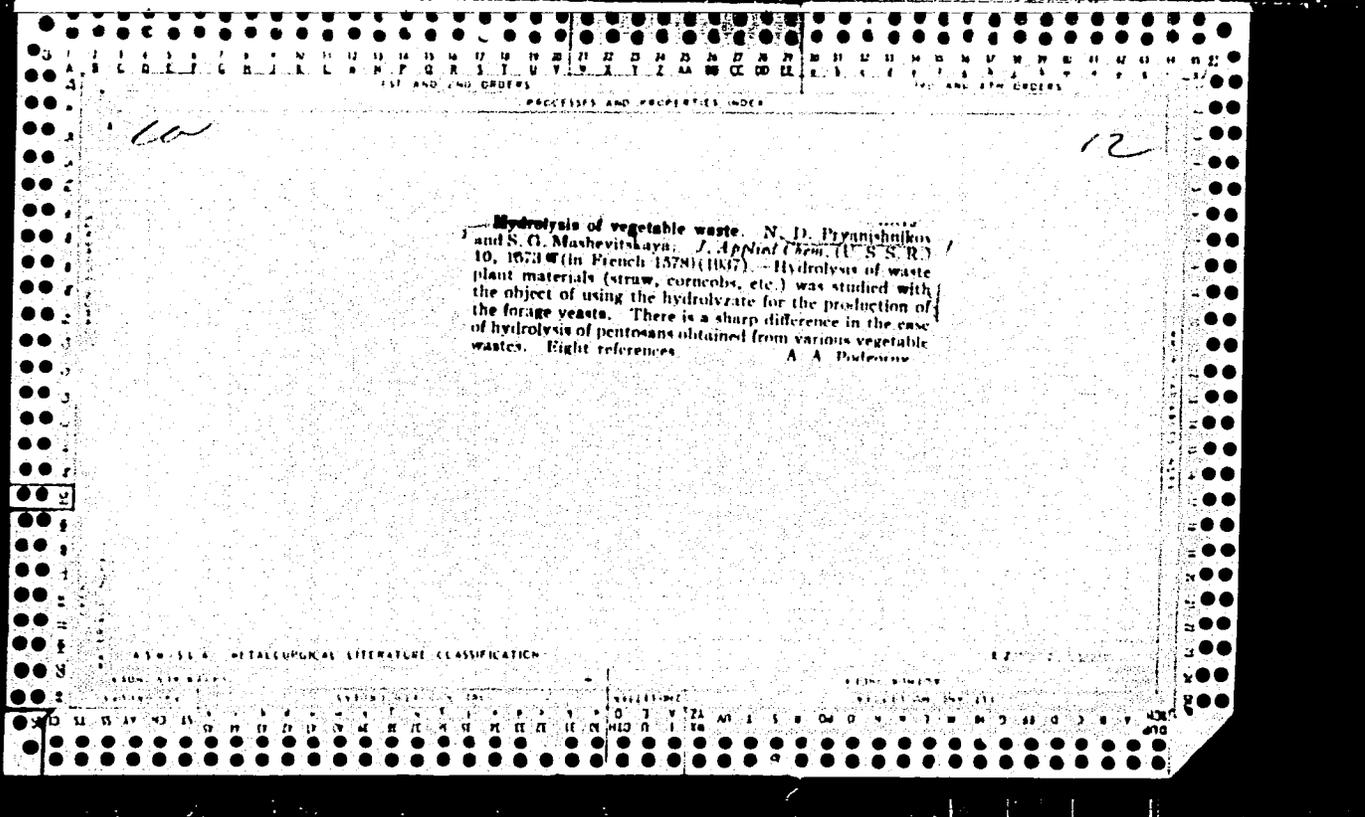
CA

The chemical treatment of straw by means of sodium hydroxide solution. N. D. Pyanishnikov and E. A. Nesterov. *Problems of Animal Husbandry* (U. S. S. R.) 1935, No. 4-5, 209-17.—The nutritive value of straw is greatly increased by 8 expts. with 1.5% NaOH soln. The percentages of org. matter, N-free material, and crude cellulose before treatment were 48.71%, 43.90%, and 58.28%, resp. After treatment the values were 68.79%, 52.15%, and 82.27%, resp. The starch equiv. (Kellner) changed from 10.22 to 32.77. S. A. Karjala

ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND GROUPS
3RD AND 4TH GROUPS
5TH AND 6TH GROUPS





PROCESSES AND PROPERTIES INDEX

10

CA

Comparative investigation of the lignin of straw and the products of humification of sugars. N. D. Pryanishnikov and E. A. Nesterova. *J. Applied Chem. (U. S. S. R.)* 11, 955-960 (in French 960-1) (1938); cf. *Uspekhi Zootekh. Nauk.* 1, No. 1 (1935).—Lignin sepd. from straw and that obtained from fir sawdust, was fused with KOH yielding considerable amts. of protocatechuic acid and pyrocatechol (total 6-10%, or 12-13% on reacted lignin); considering that a portion of these aromatic compds. was destroyed during the fusion process the yield, amounting to 6-10%, is quite conspicuous. In the fusion with KOH of humic substances prepd. by the action of H₂SO₄ on fructose and xylose, the formation of protocatechuic acid or pyrocatechol was not observed, which disclosed the different chem. nature of the humic substances and of lignin. The products of the fusion of humic substances prepd. from sugars contained unidentified compds., which gave a color reaction (violet) with FeCl₃; such a reaction was also observed in the fusion of pure fructose with KOH, but the attempt to sep. protocatechuic acid failed. Lignin obtained from straw was characterized as a substance insol. in 72% H₂SO₄, destroyed by ClO₂, forming upon fusion with KOH protocatechuic acid and pyrocatechol, indigestible by farm animals and preventing the digestion of the cellular tissue and pentosan of straw. Fourteen references. A A P.

ASO. 51A - METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
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PRYANISHNIKOV, Nikolay Dmitriyevich; USPENSKIY, A.Ye., professor, redaktor;
SHEMASINA, Ye.V., redaktor; SHPAK, Ye.G., tekhnicheskiy redaktor

[Practical work in organic chemistry] Praktikum po organicheskoi
khimii. Izd. 4-oe. Pod red. A.E.Uspenskogo. Moskva, Gos. nauchno-
tekhn. izd-vo khim. lit-ry, 1956. 244 p. (MLRA 9:7)
(Chemistry, Organic)

PRYANISHNIKOV, N.T.

Tissue therapy of certain otolaryngological diseases. Vest. otorinolar.,
Moskva 15 no.2:40-45 Mar-Apr 1953. (CML 24:3)

1. Of the Clinic for Diseases of the Ear, Throat, and Nose (Director --
Prof. A. G. Likhachev), First Moscow Order of Lenin Medical Institute.

PRYANISHNIKOV, S.K., inzhener; GOLOVTSOVA, N.A., inzhener.

The use of plastic bobbins for flax spinning. Tekst.prom. 16 no.5:
62-63 My '56. (MLRA 9:8)

1. Kostromskiy l'nokombinat imeni Lenina.
(Bobbins (Textile machinery))

PRYANISHNIKOV, S.K., inzhener; ZERNOV, B.L., inzhener.

Results of testing pressure rollers with various coverings. Tekst.prom.
16 no.1:47 Ja '56. (MLRA 9:4)
(Spinning machinery--Testing)

PRYANISHNIKOV, S.S.

Prevent excessive analyses in iron and steel industry plants.
Zav.lab.21 no.12:1510-1512 '55. (MLRA 9:4)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metal-
lurgii. (Metallurgical analysis)

PRYANISHNIKOV, V. (Leningrad)

Parallel connection of pulse tubes. Radio no.5:42 My '60.

(MIRA 13:12)

(Photography--Equipment and supplies)

PRYANISHNIKOV, V.

Current status and principal trends in the further development of
the preparation of food products for young children. *Pediatria*
37 no.3:39-45 Mr '59. (MIRA 12:4)

(INFANT NUTRITION

prep. of food products for young child., progr.
(Rus))

PRYANISHNIKOV, V.

Parallel operation of pulse tubes. Radio no.8:52 Ag '63.
(MIRA 16:9)
(Electron tubes)

VOYTINSKIY, Ye. Ya.; PRYANISHNIKOV, V. A.

Probability method for the analysis of time-related characteristics of the EEG. *Biul. eksp. biol. i med.* 60 no. 10: 118-121. 0 '65 (MIRA 19:1)

1. Nauchno-issledovatel'skiy institut detskikh infektsiy (direktor - prof. A.L. Libov), Leningrad. Submitted March 24, 1964.

FRYANISHNIKOV, V.A.

Unit for measuring two-dimensional integral and differential
distribution functions. Izv. vys. ucheb. zav.; prib. 6 no.5:
3-10 '63. (MIRA 16:11)

1. Leningradskiy institut tochnoy mekhaniki i optiki.
Rekomendovana kafedroy radiotekhniki.

PRYANISHNIKOV, V.A.

System for measuring distribution functions of infrasonic
stochastic processes. Elektrosviaz' 17 no.6:16-23 Je '63.
(MIRA 16:7)

(Information theory)

L 10002-63

SMT(a)/FGC(w)/BDS--AFFTC--IJP(C)

S/0106/63/000/006/0016/0023

ACCESSION NR: AP3001134

AUTHOR: Pryanishnikov, V. A.

52
51

TITLE: Device for measuring the distribution functions of infrasonic stochastic processes

SOURCE: 16 Elektrosvyaz', no. 6, 1963, 16-23

TOPIC TAGS: single-value functions, differential distributional functions, frequency spectrum, stationary ergodic processes, amplitude analyzer, probability density

ABSTRACT: The development is reported of a device for the measurement of single-valued integral and differential distributional functions of continuous signals in the frequency spectrum of 5 to 1000 cps. Its operation is based on the fact that such functions of a stationary ergodic process can be determined from periodic gated pulses of the signal over an interval Δ . The unknown input signal $x(t)$ is fed to a cathode follower and then to an output phase inverter via a pulse-gated diode. Because of the diode gating action, the resulting signal envelope is a sequence of unipolar rectangular pulses whose

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L 10002-63

ACCESSION NR: AP3001134

duration is 5 microsec and whose repetition period may be varied from $\Delta = 10 \text{ sup } -3$ to $10 \text{ sup } -4$ sec. This pulse sequence, with an amplitude proportional to $x(t)$, simultaneously feeds one counter and an amplitude analyzer with a second counter. The first counter totals the number of pulses (N) occurring in the analyzing interval (T), while the second counts the number of pulses (n) from the amplitude analyzer which exceed the amplitude threshold setting x for the same interval of time; thus, the distribution function is n/N . A preliminary control discriminator in the device permits examination of the distribution function over a selected section of the measurable frequency spectrum. The probability density function can be determined by means of a differential discriminator, also built into the analyzer. The probability density is defined by the ratio M/N , where M is the number of pulses in N falling in the differential interval between x and Δx . Threshold intervals of 1, 2, 5, 10, and 20 v are available up to a maximum threshold level of 100 v, giving a minimum possible probability density error of 1%. The influence of Δ on analyzer accuracy was determined experimentally, and a graph was plotted for two gating periods: $\Delta = 10 \text{ sup } -3$ sec is approximately equal to $\tau_{\text{sub } k}$ and $\Delta = 10 \text{ sup } -4$ sec is much less than $\tau_{\text{sub } k}$, where N is constant and $\tau_{\text{sub } k}$ is the correlation time of $x(t)$. The results show that at the shorter gating period, the speed of experimental points will be closer to the theoretical

Card 2/3

L 10002-63

ACCESSION NR: AP3001134

probability curve. It is concluded that accuracy could be improved by increasing the analyzing time without decreasing the gating period. The device operates with input signals from 0.02 to 60 v. "In conclusion, the author conveys his deep gratitude to S. I. Zilitinkevich for his advice, and also for the attention devoted [by him] to the given work." Orig. art. has: 20 formulas, 1 table, and 5 figures.

ASSOCIATION: none

SUBMITTED: 15Oct62

DATE ACQ: 01Jul63

ENCL: 00

SUB CODE: 00

NO REF SOV: 003

OTHER: 002

QF/AR
Card 3/3

L 34413-66

ACC NR: AT6009455

SOURCE CODE: UR/0000/65/000/000/0425/0431

AUTHOR: Pryanishnikov, V. A.

ORG: None

TITLE: Statistical processing low frequency biopotentials

SOURCE: AN SSSR. Nauchnyy sovet po kompleksnoy probleme Kibernetika. Bionika (Bionics). Moscow, Izd-vo Nauka, 1965, 425-431

TOPIC TAGS: electroencephalography, electromyography, diagnostic instrument, pulse amplitude

ABSTRACT: The author describes the apparatus designed for measuring the probability characteristics of biopotentials with a frequency spectrum of 0 to 1000 cps. Examples are given depicting the analysis of electroencephalograms.² It is shown that in measuring probability characteristics of low frequency biopotentials, amplitude analyzers and pulse counters may be used. These are widely used in experimental nuclear physics. The measurement error of the fundamental probability characteristics is rather low and does not exceed 1% in measuring one-dimensional distributions and 5% in measuring joint distributions. The proposed apparatus can be used for studying the statistic structure of the following biopotentials: electroencephalograms, electromyograms, and electrogastrograms. Card 1/2

L 34413-66

ACC NR: AT6009455

The data compiled by such an analysis can be used in various diagnostic machines. Orig. art. has: 6 figures and 9 formulas.

SUB CODE: 05 / SUBM DATE: 26Oct65 / ORIG REF: 002

06/

Card 2/2

ZHURAVLEVA, T.B.; NEVOROTIN, A.I.; PROCHUKHANOV, R.A.; PRYANISHNIKOV, V.A.;
KHARITONOVA, L.V. (Leningrad)

Changes in the hypophysial-adrenal system in disorders of the
balance of sex hormones; experimental study. Arkh. pat. 27
no.11:20-29 '65. (MIRA 18:12)

1. Kafedra patologicheskoy anatomii (zav. - prof. M.A.
Zakhar'yevskaya) I Leningr'dskogo meditsinskogo instituta
imeni I.P.Pavlova. Submitted February 14, 1964.

ACCESSION NR: AP4043718

S/0106/64/000/008/0058/0064

AUTHOR: Pryanishnikov, V. A.

TITLE: Outfit for measuring the correlation coefficient

SOURCE: Elektrosvyaz', no. 8, 1964, 58-64

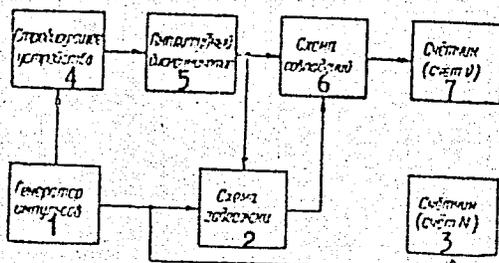
TOPIC TAGS: correlation coefficient, correlation function, correlometer, correlation

ABSTRACT: Theoretical fundamentals are presented, and a discrete-type outfit for measuring the correlation coefficient of signals having a normal distribution law is described. The discrete correlator (see Enclosure 1), based on a determination of the probability of coincidence of polarities of gated signals, has a delay system adjustable from a fraction of one microsecond to a few seconds and can also be used for measuring the crosscorrelation of two normal random processes. Calibrated by a 5--1,000 cps sinusoidal voltage, the correlometer

Card 1/3

ACCESSION NR: AP4043718

ENCLOSURE: 1



Functional diagram of the correlation measuring outfit

- 1 - pulse generator; 2 - delay circuit;
- 3 - total number of pulses counter;
- 4 - gating device; 5 - pulse-height selector;
- 6 - coincidence circuit; 7 - coincidence pulse counter

Card 3/3

FRYANISHNIKOV, V.A.

Noise generator with a regulated infralow frequency band. Izv.
vys.ucheb.zav.; prib. 5 no.6:3-11 '62. (MIRA 15:12)

1. Leningradskiy institut tochnoy mekhaniki i optiki. Rekomendo-
vana kafedroy radiotekhniki.

(Pulse techniques—Electronics)

PRYANISHNIKOV, V.A.

System for measuring the correlation factor. Elektrosviaz'
18 no.3:58-64 Ag '64. (MIRA 17:8)

OSIPOV, Yuriy, Mikhaylovich, assistant; PEVZNER, Yevsey Markovich, starshiy prepodavatel'; PRYANISHNIKOV, Viktor Alekseyevich; FUNTOV, Nikolay Mikhaylovich, kand. tekhn. nauk, dotsent

Parallel operation of impulse lamps. Izv. vys. ucheb. zav.; elektromekh. 6 no.10:1157-1160 '63. (MIRA 17:1)

1. Kafedra teoreticheskikh osnov elektrotehniki Leningradskogo instituta tochnoy mekhaniki i optiki (for Osipov, Pevzner).
2. Starshiy inzhener kafedry teoreticheskikh osnov elektrotehniki Leningradskogo instituta tochnoy mekhaniki i optiki (for Pryanishnikov).
3. Zaveduyushchiy kafedroy teoreticheskikh osnov elektrotehniki Leningradskogo instituta tochnoy mekhaniki i optiki (for Funtov).

L 31489-66

ACC NR: AP6023199

SOURCE CODE: UR/0243/66/000/001/0052/0054

AUTHOR: Voytinskiy, Ye. Ya.; Pryanishnikov, V. A.ORG: Leningrad Institute of Precision Mechanics and Optics (Leningradskiy institut tochnoy mekhaniki i optiki); Leningrad Scientific Research Institute of Children's Infections (Leningradskiy nauchno-issledovatel'skiy institut detskikh infektsiy)TITLE: Device for measuring two-dimensional functions of the distribution of electroencephalographic amplitudes ¹²

36

SOURCE: Meditinskaya promyshlennost' SSSR, no. 1, 1966, 52-54

B

TOPIC TAGS: EEG, encephalology, diagnostic instrument, electronic component

ABSTRACT: A device which makes it possible to investigate the two-dimensional functions of the distribution of two electroencephalograms (EEG) recorded from two different parts of the brain, and one electroencephalogram of different time (t) intervals is described in the article. The device can be operated by input signals of 0.2-60 volts at frequencies of 0-5,000 cycles. The device is assembled from standard radiometric instruments, including two integral discriminators of the ID-2 type, two conversion instruments, a feed-back arrangement, and two amplitude-impulse modulators. With the help of this device two-dimensional functions of distribution of amplitude electroencephalograms can be measured with a precision of $\pm 3\%$. The device can be used in different areas of experimental and clinical electroencephalography. Orig. art. has: 2 figures. [JPRS]

SUB CODE: 06 / SUBM DATE: 27May65 /

Card 1/mc

UDC: 615.471 : 616.831-073.97
097 1473

L 29326-66 RH
ACC NR: AP6018132

SOURCE CODE: UR/0239/66/052/006/0777/0781

36
B

AUTHOR: Voytinskiy, Ye. Ya.; Pryanishnikov, V. A.

ORG: Leningrad Scientific Research Institute for Children's Diseases (Leningradskiy nauchno-issledovatel'skiy institut detskikh infektsiy)

TITLE: Analog calculator¹⁰ for analyzing EEG's

SOURCE: Fiziologicheskii zhurnal SSSR v. 52, no. 6, 1966, 777-781 ²²

TOPIC TAGS: EEG, analog system, calculator

ABSTRACT: The authors have designed and tested an analog device using standard components which gives a direct and continuous analysis of electroencephalographic

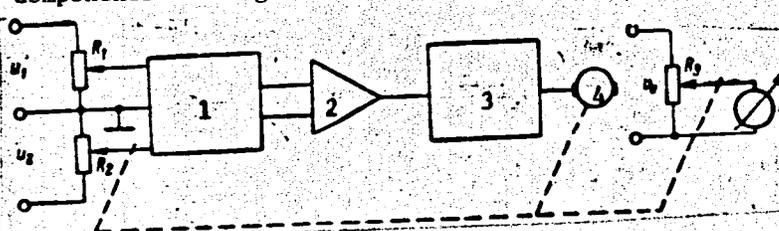


Fig. 1. Block diagram of ratio calculator

1 - Difference detector; 2 - amplifier; 3 - phase detector; 4 - reversible motor.

signals. Signals proportional to mean frequency (\bar{f}) and mean square amplitude (σ^2)

Card 1/3

UDC: 612.822.3

L 29326-66

ACC NR: AP6018132

of the EEG signal are simultaneously developed and subtracted in a ratio calculator servd (see Fig. 1) to yield an output proportional to \bar{f}/σ^2 . Tests on responses of rabbits and humans to visual stimuli have been made with the device. A sample record

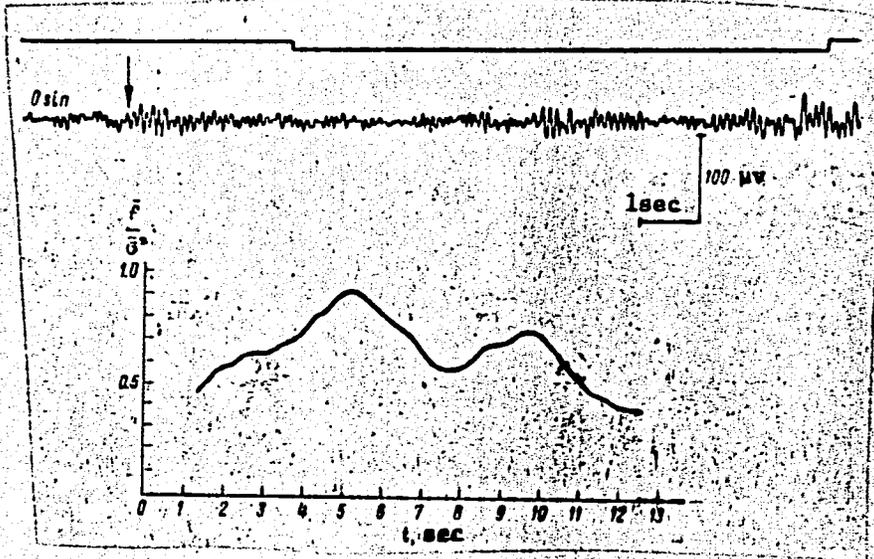


Fig. 2. EEG and resulting \bar{f}/σ^2 output.

Card 2/3

I. 29326-66

ACC NR: AP6018132

with a human EEG input is shown in Fig. 2. The analog signal shows two desynchronization peaks, caused by a sharp increase in frequency with respect to amplitude upon applying visual stimuli. A schematic and circuit specifications are included. The frequency range is given as from very low up to 1 kc, and the output error as not over 5%. Orig. art. has: 3 figures. (SH)

SUB CODE: 06,09 SUBM DATE: 13Nov64/ ORIG REF: 001/ OTH REF: 001/ ATD PRESS:

5010

Card

3/3

BK

VOYTINSKIY, Ye.Ya. (Leningrad); PRYANISHNIKOV, V.A. (Leningrad)

Probabilistic analysis of electroencephalograms. Vop. psikhol.
no.4:99-105 JI-Ag '64. (MIRA 17:11)

VOYTINSKIY, Yo.Ya.; PRYANISHNIKOV, V.A.

Automatic measurement of the probability characteristics of
the electroencephalogram. Trudy LIETIH no.13:263-271 '64.
(MIRA 18:12)

Evenings of scientific entertainment; questions, problems, experiments and observations in the fields of astronomy, meteorology, physics and mathematics. Leningrad, Lenoblono, 1936. 176 p. (54-46994)

Q171.F946

AMOSCOW, I.I.; PRYANISHNIKOV, V.K.

Estimation of the difficulty of preparing coals in prospecting operations. Razved. i obr. nedr 28 no.10:12-16 0 '62.

(MIRA 15:11)

1. Institut geologii i razrabotki goryuchikh iskopayemykh AN SSSR.

(Coal--Classification)

PRYANISHNIKOV, V.K.

Pyrite in coals from the Karaganda Basin. Trudy IGI 12:43-52
'61. (MIRA 14:3)
(Karaganda Basin--Coal--Analysis) (Pyrite)

ANMOV, I.I.; BABASHKIN, B.G.; GRECHISHNIKOV, N.P.; YEREMIN, I.V.;
KALMYKOV, G.S.; PRYANISHNIKOV, V.K.

[Industrial and genetic classification of U.S.S.R. coals;
basis for classification] Promyshlenno-geneticheskaja klas-
sifikatsiia uglei SSSR; osnovy klassifikatsii. Moskva,
Nauka, 1964. 174 p. (MIRA 17:11)

AMMOISOV, I.I.; PRYANISHNIKOV, V.K.

Using petrographic features to determine the enrichment of coals. Razved. i okh. nedr 26 no.7:10-14 JI '60. (MIRA 15:7)

1. Institut geologii i razrabotki goryuchikh iskopayemykh AN SSSR.

(Coal--Analysis)
(Microscopy)

AMMOV, I.I.; YEREMIN, I.V.; BABINKOVA, N.I.; GRECHISHNIKOV, N.P.;
PRYANISHNIKOV, V.K.; MUSYAL, S.A.; AMMOVA, Ya.M.;
BORODAVKIN, M.G., red. izd-va; YEPIFANOVA, L.V., tekhn.red.

[Petrographic characteristics and properties of coals] Petro-
graficheskie osobennosti i svoistva uglei. Moskva, Izd-vo
Akad. nauk SSSR, 1963. 379 p. (MIRA 16:1)
(Coal)

OSIPOV, Yu.M., inzh.; PEVZNER, Ye.M., inzh.; PRYANISHNIKOV, V.N.,
inzh.; FUNTOV, N.M., inzh. ~~████████████████████~~

Impulse-type lighting system. Svetotekhnika 9 no.6:28-29
Je '63. (MIRA 16:6)

1. Leningradskiy institut tochnoy mekhaniki i optiki.
(Electric lighting)
(Photography---Electric equipment)

PRYANISHNIKOV, Vadim Pavlovich, kandidat tekhnicheskikh nauk; SOKOLOV,
A.S., redaktor; BARSKOV, I.M., redaktor; LYUDKOVSKAYA, N.I.,
tekhnicheskiiy redaktor

[Quartz glass] Kvantsevoe steklo. Pod red. A.S.Sokolova. Moskva,
Gos. izd-vo lit-ry po stroit. materialam, 1956. 79 p. (MLRA 9:11)
(Quartz) (Glass)

ПРЯНИСНИКОВ, В. П.

✓ Manufacture of quartz glass: Russian suggestions. V. P. Pryanishnikov. (*Glass & Ceramics, Moscow*; 1954, 11, No. 9, 15-19; *Glas*, 1955, 32, 281-283).—A fusion furnace consists of a vertical, cylindrical firebrick casing with a central axially-extending graphite heating element. The sand is packed in the annular space which is ~6 times the diameter of the heating element. As the sand sinters and fuses it shrinks away from the element and the (cooled) fused core is easily withdrawn. Temp. conditions in the furnace and the mechanism of the fusion are described and the problems of obtaining a bubble- and batch-free fusion are discussed. I. A. Sugden

BEREZHNOY, A.I.; BRODSKIY, Yu.A.; BRONSHTEYN, Z.I.; VEYNEBERG, K.L.;
GALDINA, N.M.; GLETMAN, B.A.; GINZBURG, D.B.; GUTOP, V.G.;
GUREVICH, L.R.; DAUVAL'TER, A.N.; YEGOROVA, L.S.; KOTLYAR,
A.Ye.; KUZYAK, V.A.; MAKAROV, A.V.; POLLYAK, V.V.; POFOVA,
E.M.; PRYANISHNIKOV, V.P.; SENTYURIN, G.G.; SIL'VESTROVICH,
S.I., kand. tekhn. nauk, dots.; SOLOMIN, M.V.; TEMKIN, B.S.;
TYKACHINSKIY, I.D.; SHIGAYEVA, V.F.; SHLAIN, I.B.; EL'KIND,
G.A. [deceased]; KITAYGORODSKIY, I.I., zasl. deyatel' nauki i
tekhniki RSFSR, doktor tekhn. nauk, prof., red.; GCMOZOVA,
N.A., red.izd-va; KOMAROVSKAYA, L.A., tekhn. red.

[Handbook on glass manufacture] Spravochnik po proizvodstvu
stekla. [By] A.I.Berezhnoi i dr. Pod red. I.I.Kitaigorodskogo
i S.I.Sil'vestrovicha. Moskva, Gosstroizdat. Vol.2. 1963.
815 p. (MIRA 16:12)

(Glass manufacture)

ПРЯНИШНИКОВ, В.П.

135-58-6-10/19

AUTHORS: Okerblom, N.O., Doctor of Technical Sciences, Professor; Pryanishnikov, V.P., Candidate of Technical Sciences; and Baykova, I.P., Candidate of Technical Sciences, Dotsent.

TITLE: Welding of Quartz Glass (Svarka kvartsevogo stekla)

PERIODICAL: Svarochnoye Proizvodstvo, 1958, Nr 6, pp 30-33 (USSR)

ABSTRACT: The article contains general information on the behaviour of quartz glass during oxy-acetylene welding. Stresses caused by welding are computed and stress diagrams are shown. An industrial welding oven, with gas-electric pre-heating for cylindrical objects measuring up to 800 mm in diameter and 1.500 mm high, is described and illustrated. Welding technology is recommended. It is said that the residual welding stresses in glass can be estimated by the general welding stress and strain theory for steel [by N.O. Okerblom, Ref. 2] and the heat propagation theory of N.N. Rykalin [Ref. 3] with adjustments according to the physical properties of quartz glass. There are 5 figures and 4 Soviet references.

AVAILABLE: Library of Congress
Card 1/1

ПРЯНИШНИКОВ, В. П.

AUTHORS: Pryanishnikov, V. P., and Sokolov, A. S.

72-12-2/14

TITLE: Production and Application of Quartz Glass in the USSR (Proizvodstvo i primeneniye kvartsevogo stekla v SSSR).

PERIODICAL: Steklo i Keramika., 1957, Nr 12, pp. 6-8 (USSR)

ABSTRACT: This glass is very often used in economics due to its excellent physically-chemical properties, and has contributed to the solution of a series of important scientific-technical problems. Its production was started only in the first years after the October Revolution. In 1919 the experiments with the production of various products of quartz glass were started in the State China- and Glass Works (at present: "imeni Lomonosov"), as well as in the Ceramic Institute which was in the same territory, under the leadership of M. S. Maksimenko and N. N. Kachalov. As the result of meltings in the vacuum compression resistance furnace transparent sheets with the measurements 200 x 100 x 15 mm of satisfactory quality were obtained and samples of chemical table wares produced of it. In 1924 experiments with the drawing of tubes of nontransparent quartz glass were started in the Gorno Metallurgical Laboratory (engineer B. K. Ibakh). In 1932 the works imeni Lomonosov started as the first with the industrial output of tubes and other products of nontransparent quartz glass. In the time from 1934 to 1940 the quartz la-

Card 1/2

KHUDYKH, Mikhail Il'ich,; BELEN'KIY, S.I., retsenzent., ~~PRYANICHNIKOV~~
~~V.P.~~ retsenzent.,; KOPELEVICH, Ye.I., red.; KOGAN, V.V., tekhn. red.

[Repairing and assembling textile machinery] Remont i montazh
tkatskogo oborudovaniia. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry
po legkoi promyshl., 1958. 342 p. (MIRA 11:11)
(Textile machinery--Maintenance and repair)

ПРИШИШНИКОВ, В. П.

2921. Some considerations in the manufacture of quartz glass. — ANON. (*Glass*, 32, 281, 1955). Summary of "Problems of Quartz Glass Production" by V. P. Pryanishnikov (*Glass & Ceramics*, Moscow, 11, No. 9, 15, 1954). (See *Abstr.*, 670, 1955).

Handwritten signature or initials.

PRYANISHNIKOV, V.P., doktor tekhn. nauk

Use of glass in chemical machinery manufacture. Zhur.
VKHO 8 no.3:328-334 '63. (MIRA 16:8)

PRYANISHNIKOV V.P.

2

17 / Production of quartz glass blocks. V. P. PRYANISHNIKOV.
Steklo i Keram., 12 [5] 12-14 (1955).—Details of the technology
are given. B.Z.K.

PM

STREMLINA, S.M., vrach; PRYANISHNIKOV, V.S., inzh.

Tea drinks. Zdorov'ye 6 no.4:31 Ap '60.
(TEA)

(MIRA 13:8)

S/035/62/000/005/009/098
A055/A101

AUTHOR: Pryanishnikov, V. I.

TITLE: Present state and aspects of "mass work" for promoting popular erudition in astronomy

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 5, 1962, 7, abstract 5A40 ("Tr. 2-go s"yezda Vses. astron.-geod. o-va, 1955". Moscow, AN SSSR, 1960, 140.- 149).

TEXT: On the basis of a 36-year long experience in lecturing upon astronomy, the author gives some methodical advices on the organization of popular lectures. Some recommendations are stated as to how to attract listeners. The contents of some typical lectures are discussed, as well as the program of "astronomical evenings". The method of organizing the discussions and the replies to questions after the end of a lecture is examined. A number of recommendations are made with a view to improving the mass work of VAGO. ✓

[Abstracter's note: Complete translation]

V. Bronshten

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14(5)

SOV/132-59-7-6/17

AUTHOR: Pryanishnikov, V.Ye.

TITLE: The Economic Efficiency of Full Hole Drilling in Geological Prospecting Organizations

PERIODICAL: Razvedka i okhrana nedr, 1959, Nr 7, pp 21-25 (USSR)

ABSTRACT: The author recommends a wider use of full-hole drilling in prospecting operations. In tables 1 and 2, he compares the results obtained by full hole and by coring drilling systems made with the same ZIF-300 drilling rig. With full-hole drilling: 1) the time for lifting-lowering operations is sharply cut down; 2) the use of drive pipes can be avoided in certain cases; 3) more working time is left for the drilling operation itself. The introduction of the full-hole drilling system in different coal fields of Central Asia resulted in: a sharp increase in the volume of mechanical drilling - 37,000 linear m in 1950 (with a coring system) against 120,000 linear m in 1957 (of this, 2,900 linear m were of deep drilling in 1950 against 55,000 linear m in

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The Economic Efficiency of Full Hole Drilling in Geological Prospecting Organizations

1957); an increase in drilling speed - 84 m per drilling rig and per month against 265 m in 1957; the reduction in costs - 367 rubles in 1950 against 135 rubles in 1956 for 1 m of drilling; the introduction of deep-drilling (750-900 m) in all coal deposits of Central Asia. Table 3 shows that the increase in mechanical speed of full-hole drilling in rocks of different hardness is 50 - 100% in comparison with coring drilling. Data received from the Belgorod expedition and from the trust Mosbassuglegeologiya (the Mosbassuglegelogiya Trust) showed that costs of per meter-of-hole-drilled were also reduced 42 - 46%. In spite of all this, a wider introduction of full-hole drilling is handicapped by the shortage of rolling cutters, their insufficient hardness and their inadequate diameter in comparison with the diameters of bore-holes and drive pipes, by the absence of suitable flushing pumps, and by the in-

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The Economic Efficiency of Full Hole Drilling in Geological Prospecting Organizations

SOV/132-59-7-6/17

sufficient introduction of the electrical core-sampling method. There are 3 tables.

ASSOCIATION: Glavgeologiya RSFSR

Card 3/3

PANASENKO, G.P.; PRYANISHNIKOV, V.Ye.; STLETSENKO, I.P.; CHOPIKASHVILI, M.A.

Some test results of cast core bits. ~~Razved.~~ i okh. neдр 28
no. 3:22-26 Mr '62. (MIRA 15:4)

1. Volgo-Donskoye geologicheskoye upravleniye.
(Boring machinery--Testing)

PRYANISHNIKOV, V.Ye.; VEYSMAN, A.D.

Lightweight cementing unit for test-hole drilling. Razved. i
okh. nedr 27 no.10:36-38 0 '61. (MIRA 15:3)

1. Volgo-Donskoye geologicheskoye upravleniye.
(Boring--Equipment and supplies)

VOL'FSON, L.G.; MEL'NIKOV, N.N.; PLATE, A.F.; PEREL'MUTER, P.M.;
VOLODKOVICH, S.D.; PRYANISHNIKOVA, M.A.; LEBEDEVA, K.V.;
VOLOSHKEVICH, N.P.

Continuous method for the preparation of aldrin. Khim.prom.
no.10:714-717 0 '62. (MIRA 15:12)
(Aldrin)

PRYANISHNIKOVA, N.T.

Trimecaine, a new anesthetic. Sov.med. 26 no.1:109-111 Ja '63.
(MIRA 16:4)

1. Iz laboratorii obshchey farmakologii (zav. - prof. G.A. Ponomarev
[deceased]) Instituta farmakologii i khimioterapii (dir. -
deystvitel'nyy chlen AMN SSSR prof. V.V.Zakusov) AMN SSSR.
(ANESTHETICS)

SEKHNEVA, M. A.

"Synthesis of Several Homologues of N-Substituted Pyrrole
and Pyrrolidine," Zhur. Obshch. Khim., 19, No. 9, 1949.
Moscow Order Lenin State Univ. im M. V. Lomonosov,
Mbr. , Lab. Organic Chem. im N. D. Zelinskiy, -1949.